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eNewsletter Available

If you would prefer to receive future issues of *Environmental Connection* via e-mail, please let us know by sending an e-mail, with your name and e-mail address, to **lvernon@utah.gov**. DEQ thanks you for your continued interest in and support of *Environmental Connection.*

Utahns Enjoy Better Protected and Cleaner Land

Protection and clean up of Utah's land resources have made great strides during the last three decades. Prior to the 1970s, open dumps and burning of trash were common. It was normal to dump hazardous waste on site. In some cases, homes were built on those sites.

All that changed with the establishment of solid and hazardous waste regulations and cleanup programs to protect the environment and public health.

For example, in 30 years, Utah has gone from having more than 300 open dumps to approximately 50 permitted landfills. Regulations now call for liners, groundwater monitoring, fencing, daily cover, clay caps, rodent and litter control, and water runoff control.

A recycling infrastructure has been built that extends the life of our landfills and provides beneficial reuse of material. We now can recycle used oil, used tires, glass, aluminum cans, cardboard, newspaper, and green waste such as lawn clippings and trees.

Furthermore, programs such as Superfund, Brownfields, Voluntary Cleanup, and Underground Storage Tanks investigate and clean up hazardous waste sites threatening public health and the environment, and eliminate and prevent further environmental contamination. Once cleaned up, many abandoned commercial and industrial sites are used for economic redevelopment.

The progress is impressive. In Utah, under the Superfund, Voluntary Cleanup, and Brownfields programs, 5,075 acres or 1,343 properties, and 467 million gallons of groundwater have been cleaned up. In the underground storage tank program, 4,988 sites have been closed as clean (i.e., tanks were removed, upgraded, or taken out of service). In the leaking underground storage tank program, 3,622 total sites, including 1,274 sites with groundwater contamination, totaling 2,718 acres, have been cleaned up.

"We live in a totally different world now, but it didn't happen overnight," said Dennis Downs, director of the Division of Solid and Hazardous Waste. "Progress was gradual."

To be sure, technology has definitely helped, but more than that, the attitude toward proper management of waste has been the greater impetus toward a healthier environment.

"The cultural change has been significant," Downs said. "People are more aware of the environment and want to protect it. For instance, we see more people implementing and participating in recycling programs. That's good news for the environment."

This issue of *Environmental Connection* highlights the progress we've made and the work that still needs to be done in protecting and cleaning up Utah's land.

Newsletter of the Utah Department of Environmental Quality

Cleanup Programs Return Contaminated Land to Beneficial Use

In 1997, Utah made a significant leap forward in helping return contaminated property to beneficial use when the Legislature passed a bill to establish the Voluntary Cleanup Program (VCP).

Under the direction of DEQ, the program encourages the voluntary private-party cleanup of sites where there has been a contaminant release threatening public health and the environment. The cleanup removes the stigma attached to these sites, which may block economic redevelopment, and clears the path for beneficial use of these properties.

VCP came on the heels of another cleanup program from EPA that helped clear the way for redevelopment — Brownfields Pilot Assessment Program. In 1995, EPA began providing grants to pilot properties across the nation struggling to expand, redevelop, or reuse because of contamination.

Four of those pilots sites are in Utah: Gateway in Salt Lake City, Ironton in Provo, Murray Smelter in Murray, and Block 37 in Ogden. Gateway, Ironton, and Block 37 are also VCP sites.

Ogden City Block 37 A Success Story

Block 37 in Ogden's central business district used to be an eyesore — and a public health hazard. Years of industrial and commercial activity on the block resulted in metal and solvent contamination in the soil and groundwater. At one time, the most notable facility on the 10-acre block was Ogden Iron Works. The facility was removed in the late 1990s.

Ogden purchased the block with the intent of redeveloping it to revitalize the slumping business district and provide jobs in an area of high unemployment. In 1997, Ogden received a Brownfields pilot grant to conduct a site assessment and determine the extent of the contamination. In 2000, the city applied to Utah's VCP. That act formed a partnership among local, state, federal, and private entities committed to cleaning up the block.

The clean up began in 2001 and was completed in 2002. The cleanup was done in phases, starting with the Iron Works area on the southeast corner. Doing the cleanup in phases also allowed Ogden the flexibility to relocate eight businesses, clean areas once they were ready, and start construction on the clean parcels.

Block 37 is now home to a parking lot and the multi-story "Twin Rivers" office complex that houses the U.S. Internal Revenue Service.

In the process of cleaning up the contaminated land, Ogden preserved a bit of history. The Boyle Warehouse, on the state historical registry, was renovated. It sits next to the Twin Rivers complex, mixing a bit of the past with the present.

Progress Continues

Since the VCP started seven years ago, 13 sites have received a "Certificate of Completion," meaning the sites have been successfully cleaned up. Twelve other sites are currently undergoing clean up. While most sites are in Salt Lake County, others are in Utah, Weber, Davis, Summit, and Uintah counties.

Meanwhile, Utah received a grant to do "targeted Brownfields assessments." This program is helping the state conduct environmental assessments at Brownfields and create an inventory of these sites across the state. The purpose is to minimize the uncertainties of contamination often associated with Brownfields and work with other efforts under the Brownfields Initiative to promote cleanup and redevelopment. Once these assessments are completed, the VCP is available to help with the clean up, if warranted.

Through site assessments and voluntary cleanups, Utah residents and resources are protected and the quality of life in the state enhanced.

Block 37
Before Cleanup

Salvage yard next to the historical Boyle Warehouse.

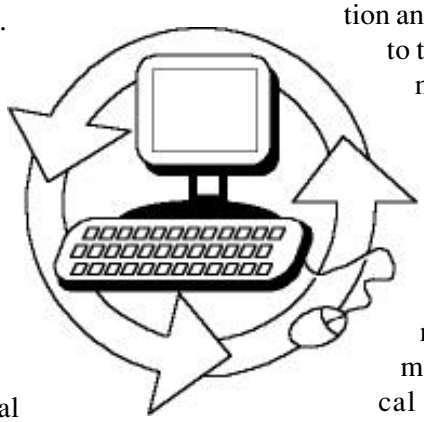
Block 37
After Cleanup

Office complex next to the renovated Boyle Warehouse.

Electronic Waste Recycling Protects the Environment

If you are like millions of Americans, you probably have an outdated computer collecting dust in your closet. You're not sure what to do with it now that you've replaced it. You rightfully hesitate throwing it in the trash. There's good news — more than 97 percent of computer contents can be reused or recycled.

Outdated computers are considered electronic waste (e-waste), along with fax machines, VCRs, CD players, and TVs. They have finished their useful life. So why not just throw them away? Consider this:



The U.S. Environmental Protection Agency estimates that 250 million computers will become obsolete within the next five years. Of key environmental concern are the cathode ray tubes (CRTs) found in monitors. Each tube contains up to eight pounds of lead — enough to characterize the electronics as hazardous waste. There is growing concern that, when landfilled, these toxics will leach into the groundwater.

Consumer electronics contribute 40 percent of the lead found in landfills. Many of them also contain heavy metals such as mercury, cadmium, and beryllium. Electronics have replaced batteries as the largest single source of heavy metals in the municipal waste stream.

"Everyone agrees that disposing of e-waste in the landfill is the least desirable option because of the long-term potential environmental hazard," said Rusty Lundberg, solid waste branch manager in the Division of Solid and Hazardous Waste.

The most desirable option is recycling of e-waste. Recycling used electronics is good for the environment because it encourages the safe management of their potentially hazardous components and supports the recovery and reuse of valuable materials. It also helps reduce the pollution and energy use tied to the production of new electronic equipment from new mineral resources.

According to Lundberg, the availability of nearby recycling markets is a critical component for successful recycling. Utah is somewhat limited in the number of recycling outlets since the state does not have major recycling markets.

"We are working to encourage more recycling opportunities, but this effort will take some time without the necessary accompanying market development."

Although Utah has hazardous waste regulations, it does not have regulations specific to used computer monitors, other used computer hardware, or used electronic equipment. However, regulations are in the works. EPA has proposed a rule addressing the proper management of CRTs and expects to have a final rule out later this year. Lundberg said Utah is likely to adopt the federal rule as a state requirement.

Until then, DEQ recommends that businesses and households properly

Continued on page 4

Did you know . . .

- 2,054,800 tons of electronic waste is laid to rest in landfills each year.
- Nearly 250 million computers will become obsolete in the next five years.
- Many people discard computers every three to five years.
- In 2001, only 11 percent of personal computers retired in the United States were recycled.
- Mobile phones will be discarded at a rate of 130 million per year by 2005, resulting in 65,000 tons of waste.
- TVs and computers can contain an average of four pounds of lead (depending on their size, make, and vintage) as well as other substances of potential concern like chromium, cadmium, mercury, beryllium, nickel, zinc, and brominated flame retardants. These materials need to be handled carefully.

Source: U.S. Environmental Protection Agency

On the Web . . .

Electronics Recycling

http://www.deq.utah.gov/what_you_can_do/recycling/electronic.htm

Continued from page 3

manage their e-waste to protect the environment and public health. Here's how:

Businesses

Color computer monitors and TVs must be managed as a hazardous waste when disposed by a business. (Households are excluded from federal and state hazardous waste regulation.) This means that the monitors can only go to a permitted hazardous waste disposal facility. However, if the color monitors and TVs are going to a recycler or to a company that refurbishes them for reuse, then DEQ does not consider them to be subject to hazardous waste regulation.

Similarly, disposal of other computer components by businesses can be subject to hazardous waste regulations, but used computer equipment sent for recycling is not subject to hazardous waste requirements.

Electronic equipment sent for recycling should be packaged to prevent breakage in shipment and have written documentation of the shipment and receipt by the recycler. Documentation ensures that it is indeed being sent for reuse/recycling and not for disposal.

Households

While it is not illegal for a household to send electronic equipment to a landfill, DEQ recommends the following recycling options, in order of preference:

- Reuse/recycle through individual contacts such as family and friends.
- Donate to public and private organizations.
- Use household hazardous waste collection centers, if available. Contact your local health department for a nearby location.
- Contact the manufacturer regarding any "take back" options they may offer. Some manufacturers are taking back used computer equipment, but you may pay a fee and the packaging and shipping costs.

2004 DEQ Legislative Wrap-Up

During the 2004 Session, the Utah State Legislature passed more than 400 pieces of legislation. Several of those bills focused on environmental issues from landfills to water conservation to meth lab cleanup. Below is a summary of environmental issues.

Highlights

- HB13 and HB145 were proposed as a result of the Hazardous Waste Regulation and Tax Policy Legislative Task Force study. Both bills passed.
- DEQ asked for and received a restoration of $250,000 cut from the budget last year. The restored funds will come through increases in user fees in the X-ray registration/inspection program and in the air quality aggregate operations (e.g., gravel pit relocation and compliance) oversight program.
- The Legislature appropriated $500,000 to continue the fight against storage of high-level nuclear waste in Utah.
- DEQ took no additional budget cuts and received no new general fund monies.

Solid Waste

- ***Passed:*** SCR 1: Legislature approved the Solitude Landfill in Green River to accept solid waste from outside its jurisdiction.
- ***Passed:*** SCR 2: Legislature approved the Peck Brothers Landfill in Saratoga Springs to be a commercial construction and demolition landfill.
- ***Referred to Study:*** Fair and equitable municipal and county landfill fees.
- ***Referred to Study:*** HB338: Deposit at time of purchase and refund upon return of recyclable bottles and cans.

Hazardous/Radioactive Waste

- ***Passed:*** HB13 reduces the fee on treated hazardous waste from $28 to $14 a ton and eliminates the gross receipts tax on hazardous and non-hazardous solid waste facilities.
- ***Passed:*** HB145 establishes new requirements for Legislative and Gubernatorial approval for radioactive waste disposal.

Environmental Response and Remediation

- ***Passed:*** HB123 establishes a certification program for meth lab decontamination specialists. The Department of Environmental Quality will administer the certification program, the Department of Health will establish cleanup standards, and the local health departments will maintain a list of contaminated properties in their jurisdiction, removing properties from the list when they are cleaned up.
- ***Referred to Study:*** HB 180 would align state law with federal law regarding liability issues for Brownfields property owners.

Water

- ***Passed:*** HB71 requires drinking water systems to have water conservation plans.
- ***Passed:*** HB232 establishes new requirements for water well drilling.
- ***Passed:*** HB247 establishes a two-year legislative task force to study water issues such as water rights, groundwater management, and water reuse.
- ***Referred to Study:*** HB243 (water rights) and SB151 (gray water reuse) were referred for further study by the task force established in HB247.

Radiation

- ***Passed:*** HJR20 is a resolution that encourages the National Academy of Sciences to look at other counties in Utah that may be eligible for compensation under the Radiation Exposure Compensation Act.

Air Quality

- ***Referred to Study:*** Tax credit qualifications for clean air vehicles.

Gov. Walker Encourages Utahns to Protect Watersheds

In November 2003, Gov. Olene Walker unveiled an aggressive plan to improve water quality throughout the state by introducing her Watershed Initiative. The comprehensive program is designed to improve both water quality and quantity over the coming years. The governor is focusing on segments of 25 key streams and reservoirs. (See "25 Waterbodies That Need Your Help.")

"This project can affect every Utahn in a positive way," said Walker. "In order to improve Utah, today and tomorrow, we need to ensure that our future prosperity has a clean and sustainable supply of water."

A watershed is an area of land from which all water drains to the same location such as a stream, pond, lake, river, or wetland. Watersheds are dynamic natural systems that not only provide water, forage, and habitat for wildlife and livestock, they help clean our air and offer places to recreate and find solitude. They also contain timber, energy, and mineral resources, and are the headwaters of our food supply.

"It is my goal to provide for cleaner rivers and lakes, enhance water yield, and increase public awareness and wise use of Utah's watersheds." Walker said.

To meet this goal, the governor established a "Know Your Watershed" campaign. "Know Your Watershed" means being able to answer these questions: What is a watershed? Where is my watershed? Is my watershed healthy? Where does the water go? What can I do?

In addition to the campaign, the governor has issued a call to action and challenged every Utahn to "Adopt-A-Waterbody." She has set a statewide goal to double the number of waterbodies that have been adopted.

Adopt-A-Waterbody is a community involvement program that unites a variety of volunteer groups throughout the state to work toward one purpose: to protect and enhance the waters of the beautiful state of Utah. It is designed to benefit Utah's water resources and be rewarding and educational for the volunteer groups involved.

More information about "Adopt-A-Waterbody is available on the Web at www.adoptawaterbody.utah.gov. There you can find your local watershed and possibly join an already existing program or start your own.

Gov. Walker demonstrates the importance of protecting Utah's watersheds to Backman Elementary fourth graders.

25 Waterbodies That Need Your Help

1. Hyrum Reservoir
2. Lower Little Bear River
3. Cub River
4. Newton Creek
5. Lower Bear River
6. Spring Creek
7. East Canyon Creek
8. Pineview Reservoir
9. Upper San Pitch River
10. Upper Sevier River
11. East Fork Sevier River
12. Middle Fremont River
13. Johnson Valley Reservoir
14. Forsyth Reservoir
15. Onion Creek
16. Ashley Creek
17. Lower Virgin River
18. Upper Price River
19. Middle Beaver River
20. Thistle Creek
21. Deer Creek Reservoir
22. Silver Creek
23. Mill Creek
24. Cottonwood Wash
25. Chalk Creek

News Briefs

Utah Adopts Regional Haze Plan

Gov. Olene Walker has signed a letter of submittal to the U.S. Environmental Protection Agency, setting in motion Utah's plan to improve and protect air quality in national parks in the West.

"Utah's plan is a significant milestone because it represents a regional approach to reducing haze in the West's most celebrated national parks, five of which are in our own backyard," Walker said. "That means that over the next two decades Utah's air will become cleaner, and visitors to our national parks will more fully enjoy the scenic vistas that deserve to be protected."

Utah was the first state to adopt a regional haze plan. Utah's plan aims to reduce air pollution by using cost-effective, market-based programs rather than traditional command-and-control regulations. The plan's goal is to reduce sulfur dioxide by 50 to 70 percent by 2040.

Gov. Walker signs Utah's regional haze plan to improve and protect air quality in national parks in the West.

NRD Trustee Forms Stakeholder Forum

Natural Resource Damage Trustee Dianne Nielson has formed a Stakeholder Forum for the Southwest Jordan Valley Groundwater Cleanup Project.

The purpose of the Forum is to share information with affected parties, facilitate a better understanding of technical issues, and discuss issues surrounding the cleanup of groundwater contamination from historical mining activities in the Oquirrh Mountains in Salt Lake County. Information about the Forum and cleanup project is available at http://www.deq.utah.gov/issues/nrd/index.htm.

NRC Reviews Radiation Control Program

After a full review, the Division of Radiation Control received an overall "satisfactory" rating, the highest grade given, from the U.S. Nuclear Regulatory Commission for regulating radioactive materials and low-level radioactive waste. It also found the Utah program "adequate to protect public health and safety and compatible with the Nuclear Regulatory Commission's program."

Water Quality Manager Receives Service Award

Walter L. Baker, manager of the Engineering and Water Quality Management Branch and acting director in the Utah Division of Water Quality, has received the Water Environment Association of Utah's Grant K. Borg Extraordinary Service Award, which recognizes long-term commitment and achievement in the area of water quality improvement in Utah. Baker joins 11 leaders in the field of water environment who have received the award since it was implemented in 1983.

Walt Baker

Division of Drinking Water Receives Award of Excellence

The Division of Drinking Water has received an Award of Excellence and has been recognized as the 2003 Associate Member of the Year by the Rural Water Association of Utah.

Drinking Water Division Director Kevin Brown (right) accepts the Award of Excellence from RWA of Utah.

Personnel Changes

New DEQ Managers/Directors

Walt Baker is the acting director of the Division of Water Quality and acting executive secretary of the Utah Water Quality Board, and manager of the Engineering and Water Quality Management Branch in the Division of Water Quality. He was previously the Construction Assistance Section manager in the Division of Water Quality.


Bryce Bird

Bryce Bird is the Air Standards Branch manager in the Division of Air Quality. He was previously the Hazardous Air Pollutants Section manager in the Air Standards Branch.

Brent Everett is the manager of the Superfund Branch in the Division of Environmental Response and Remediation. Brad Johnson vacated the position when he was appointed the division's director. Everett was previously the division's Superfund Remedial Projects Section manager.

Dane Finerfrock is the director of the Division of Radiation Control and executive secretary of the Radiation Control Board. He replaces Bill Sinclair, who was appointed the department's deputy director. Finerfrock was the division's Radioactive Waste and Environmental Monitoring Section manager.


Dane Finerfrock

Robert Ford is the Hazardous Air Pollutants Section (HAPS) manager in the Division of Air Quality. He was previously a HAPS environmental scientist, managing the lead-based paint program.

Rob Herbert is the manager of the Groundwater Protection Section in the Division of Water Quality. Herbert was a hydrogeologist in the Division of Radiation Control.

Mike Herkimer is the Permitting and Compliance Section manager in the Division of Water Quality. He was previously an environmental scientist in the section.

Ed Macauley is the manager of the Construction Assistance Section in the Division of Water Quality. Macauley was an environmental engineer in the division.

Loren Morton is the manager of the Radioactive Waste and Environmental Monitoring Section in the Division of Radiation Control. Morton was the division's senior hydrogeologist.


Bill Sinclair

Bill Sinclair is the deputy director of the Department of Environmental Quality. Sinclair was the Radiation Control Division director and Utah Radiation Control Board executive secretary.

Randy Taylor is the manager of the Permitting, Compliance, and Monitoring Branch in the Division of Water Quality. Taylor was the Petroleum Storage Tank Remedial Section manager in the Division of Environmental Response and Remediation.


Ryan Walker

Ryan Walker is the director of the Office of Information Technology. Walker was the office's technical support supervisor.

Retirements

Gayle Smith, Permitting and Compliance Section manager in the Division of Water Quality, retired February 27 after 33 years of service with the State of Utah. Smith played a major role in securing the passage of Utah's Safe Drinking Water Act and helped found the Rural Water Association of Utah.

Marv Maxell, Air Standards Branch manager in the Division of Air Quality, retired March 12 after 30 years of service with the State of Utah. Maxell established Utah's first water monitoring and hazardous air pollutants programs.


Don Ostler

Don Ostler, the nation's longest-serving state water quality director, retired May 14 after 32 years of service with the State of Utah. He implemented the Clean Water Act and developed the state Groundwater Protection Program. Ostler and other state, federal, and private partners developed the state environmental program for concentrated animal feeding operations, which became a model for the federal regulatory program. He has also been involved in the administration of various programs such as construction grants, state wastewater loans, and water restoration plans.

Michael Georgeson, Engineering Section manager in the Division of Drinking Water and assistant executive secretary to the Utah Drinking Water Board, retired June 30 after 29 years with the State of Utah. A hallmark of Georgeson's contribution to Utah's quality of life was his management of the state and federal financial assistance programs to help communities build drinking water infrastructure. He built the state program from the ground up beginning in 1983. Georgeson became responsible for the federal program when it was launched in 1997. Using both programs, he has managed the lending of $115 million in loans or other financial assistance to 200 communities in Utah.

Utah Continues to Increase Volume of Used Oil, Tire Recycling

Used Tire Recycling

Utah continues to increase the volume of used tire recycling. Tire recycling has increased from 43 tons in 1991 to more than 31,000 tons in 2003. Recycling tires provides a good fuel source and removes a potential source of water contamination and breeding ground for mosquitoes.

Year	Tons Recycled
1991	43
1992	2,642
1993	5,490
1994	9,757
1995	14,039
1996	22,655
1997	26,705
1998	26,993
1999	28,173
2000	27,857
2001	30,179
2002	28,945
2003	31,734

LEARN MORE

Used Tire Recycling
Ralph Bohn (801) 538-6794
rbohn@utah.gov
http://www.hazardouswaste.utah.gov/sws.htm#UtahWasteTireRecyclingProgram

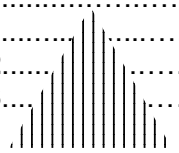
Used Oil Recycling
Sam Schroyer (801) 538-6341
sschroyer@utah.gov
http://www.hazardouswaste.utah.gov/Frames.htm

Put Used Oil in Its Place!

Used Oil Recycling

Utah continues to increase the volume of do-it-yourself used oil recycling. In 1995, 123,586 gallons were recycled. In 2003, 485,212 gallons were recycled. Prior to the enactment of the recycling program, used oil was discarded, contaminating soil and groundwater. Now, used oil is reclaimed and reused.

Year	Gallons Recycled
FY 95	123,586
FY 96	234,603
FY 97	262,746
FY 98	311,977
FY 99	341,537
FY 00	368,951
FY 01	394,648
FY 02	466,343
FY 03	485,212



Environmental Connection, Published by the Utah Department of Environmental Quality
P.O. Box 144810, Salt Lake City, UT 84114-4810 ● (801) 536-4400 ● www.deq.utah.gov
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Printed on Recycled Paper

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DEPARTMENT OF ENVIRONMENTAL QUALITY
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Salt Lake City, UT 84114-4810

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